Samson, Harvey S.

2018 – 00542

Exercise 1: Running Containers

-   Pulling an image


```
Command Prompt                                                                          —  □  ×
C:\Users\Harvey Samson>docker images
REPOSITORY      TAG        IMAGE ID      CREATED      SIZE

C:\Users\Harvey Samson>docker search ubuntu
NAME                                               DESCRIPTION                          STARS  OFFICIAL  AUTOMATED
ubuntu                                             Ubuntu is a Debian-based Linux operating sys…  12302  [OK]
dorowu/ubuntu-desktop-lxde-vnc                     Docker image to provide HTML5 VNC interface …  535              [OK]
websphere-liberty                                  WebSphere Liberty multi-architecture images …  273    [OK]
rastasheep/ubuntu-sshd                             Dockerized SSH service, built on top of offi…  251              [OK]
consol/ubuntu-xfce-vnc                             Ubuntu container with "headless" VNC session…  240              [OK]
ubuntu-upstart                                     Upstart is an event-based replacement for th…  110    [OK]
1and1internet/ubuntu-16-nginx-php-phpmyadmin-mysql-5   ubuntu-16-nginx-php-phpmyadmin-mysql-5     50               [OK]
open-liberty                                       Open Liberty multi-architecture images based…  45     [OK]
ubuntu-debootstrap                                 debootstrap --variant=minbase --components=m…  44     [OK]
i386/ubuntu                                        Ubuntu is a Debian-based Linux operating sys…  25
1and1internet/ubuntu-16-apache-php-5.6             ubuntu-16-apache-php-5.6                    14               [OK]
1and1internet/ubuntu-16-apache-php-7.0             ubuntu-16-apache-php-7.0                    13               [OK]
1and1internet/ubuntu-16-nginx-php-phpmyadmin-mariadb-10   ubuntu-16-nginx-php-phpmyadmin-mariadb-10  11          [OK]
1and1internet/ubuntu-16-nginx-php-5.6-wordpress-4  ubuntu-16-nginx-php-5.6-wordpress-4         9                [OK]
1and1internet/ubuntu-16-nginx-php-5.6              ubuntu-16-nginx-php-5.6                     8                [OK]
1and1internet/ubuntu-16-apache-php-7.1             ubuntu-16-apache-php-7.1                    7                [OK]
1and1internet/ubuntu-16-nginx-php-7.0             ubuntu-16-nginx-php-7.0                     4                [OK]
pivotaldata/ubuntu                                 A quick freshening-up of the base Ubuntu doc…  4
1and1internet/ubuntu-16-nginx-php-7.1-wordpress-4  ubuntu-16-nginx-php-7.1-wordpress-4         3                [OK]
pivotaldata/ubuntu16.04-build                      Ubuntu 16.04 image for GPDB compilation     2
1and1internet/ubuntu-16-php-7.1                    ubuntu-16-php-7.1                           1                [OK]
1and1internet/ubuntu-16-sshd                       ubuntu-16-sshd                             1                [OK]
pivotaldata/ubuntu-gpdb-dev                        Ubuntu images for GPDB development          1
smartentry/ubuntu                                  ubuntu with smartentry                     1                [OK]
pivotaldata/ubuntu16.04-test                       Ubuntu 16.04 image for GPDB testing        0

C:\Users\Harvey Samson>docker pull ubuntu:16.04
Error response from daemon: Head https://registry-1.docker.io/v2/library/ubuntu/manifests/16.04: Get https://auth.docker.io/token?scope=repository%3Alibrary%2Fubuntu%3A
pull&service=registry.docker.io: net/http: TLS handshake timeout

C:\Users\Harvey Samson>docker pull ubuntu:16.04
16.04: Pulling from library/ubuntu
80bce60046fa: Pull complete
55a738a15540: Pull complete
e19cf0706c62: Pull complete
de4cdd6c27d1: Pull complete
Digest: sha256:9775877f420d453ef790e6832d77630a49b32a92b7bedf330adf4d8669f6600e
Status: Downloaded newer image for ubuntu:16.04
docker.io/library/ubuntu:16.04

C:\Users\Harvey Samson>
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Command Prompt                                                                          —  □  ×
1and1internet/ubuntu-16-apache-php-7.0             ubuntu-16-apache-php-7.0                    13               [OK]
1and1internet/ubuntu-16-nginx-php-phpmyadmin-mariadb-10   ubuntu-16-nginx-php-phpmyadmin-mariadb-10  11          [OK]
1and1internet/ubuntu-16-nginx-php-5.6-wordpress-4  ubuntu-16-nginx-php-5.6-wordpress-4         9                [OK]
1and1internet/ubuntu-16-nginx-php-5.6              ubuntu-16-nginx-php-5.6                     8                [OK]
1and1internet/ubuntu-16-apache-php-7.1             ubuntu-16-apache-php-7.1                    7                [OK]
1and1internet/ubuntu-16-nginx-php-7.0             ubuntu-16-nginx-php-7.0                     4                [OK]
pivotaldata/ubuntu                                 A quick freshening-up of the base Ubuntu doc…  4
1and1internet/ubuntu-16-nginx-php-7.1-wordpress-4  ubuntu-16-nginx-php-7.1-wordpress-4         3                [OK]
pivotaldata/ubuntu16.04-build                      Ubuntu 16.04 image for GPDB compilation     2
1and1internet/ubuntu-16-php-7.1                    ubuntu-16-php-7.1                           1                [OK]
1and1internet/ubuntu-16-sshd                       ubuntu-16-sshd                             1                [OK]
pivotaldata/ubuntu-gpdb-dev                        Ubuntu images for GPDB development          1
smartentry/ubuntu                                  ubuntu with smartentry                     1                [OK]
pivotaldata/ubuntu16.04-test                       Ubuntu 16.04 image for GPDB testing        0

C:\Users\Harvey Samson>docker pull ubuntu:16.04
Error response from daemon: Head https://registry-1.docker.io/v2/library/ubuntu/manifests/16.04: Get https://auth.docker.io/token?scope=repository%3Alibrary%2Fubuntu%3A
pull&service=registry.docker.io: net/http: TLS handshake timeout

C:\Users\Harvey Samson>docker pull ubuntu:16.04
16.04: Pulling from library/ubuntu
80bce60046fa: Pull complete
55a738a15540: Pull complete
e19cf0706c62: Pull complete
de4cdd6c27d1: Pull complete
Digest: sha256:9775877f420d453ef790e6832d77630a49b32a92b7bedf330adf4d8669f6600e
Status: Downloaded newer image for ubuntu:16.04
docker.io/library/ubuntu:16.04

C:\Users\Harvey Samson>docker pull ubuntu:16.10
16.10: Pulling from library/ubuntu
dca7be20e546: Pull complete
40bca54f5968: Pull complete
61464f23390e: Pull complete
d99f0bcd5dc8: Pull complete
120db6f90955: Pull complete
Digest: sha256:8dc9652808dc091400d7d5983949043a9f9c7132b15c14814275d25f94bca18a
Status: Downloaded newer image for ubuntu:16.10
docker.io/library/ubuntu:16.10

C:\Users\Harvey Samson>docker images
REPOSITORY      TAG        IMAGE ID      CREATED      SIZE
ubuntu          16.04      9ff95a467e45  9 days ago   135MB
ubuntu          16.10      7d3f705d307c  3 years ago  107MB

C:\Users\Harvey Samson>
```

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Command Prompt                                                                    —  □  X

C:\Users\Harvey Samson>docker pull ubuntu:16.04
Error response from daemon: Head https://registry-1.docker.io/v2/library/ubuntu/manifests/16.04: Get https://auth.docker.io/token?scope=repository%3Alibrary%2Fubuntu%3A
pull&service=registry.docker.io: net/http: TLS handshake timeout

C:\Users\Harvey Samson>docker pull ubuntu:16.04
16.04: Pulling from library/ubuntu
80bce60046fa: Pull complete
55a738a15540: Pull complete
e19cf0706c62: Pull complete
de4cdd6c27d1: Pull complete
Digest: sha256:9775877f420d453ef790e6832d77630a49b32a92b7bedf330adf4d8669f6600e
Status: Downloaded newer image for ubuntu:16.04
docker.io/library/ubuntu:16.04

C:\Users\Harvey Samson>docker pull ubuntu:16.10
16.10: Pulling from library/ubuntu
dca7be20e546: Pull complete
40bca54f5968: Pull complete
61464f23390e: Pull complete
d99f0bcd5dc8: Pull complete
120db6f90955: Pull complete
Digest: sha256:8dc9652808dc091400d7d5983949043a9f9c7132b15c14814275d25f94bca18a
Status: Downloaded newer image for ubuntu:16.10
docker.io/library/ubuntu:16.10

C:\Users\Harvey Samson>docker images
REPOSITORY    TAG      IMAGE ID       CREATED       SIZE
ubuntu        16.04    9ff95a467e45   9 days ago    135MB
ubuntu        16.10    7d3f705d307c   3 years ago   107MB

C:\Users\Harvey Samson>docker rmi 7d3f705d307c
Untagged: ubuntu:16.10
Untagged: ubuntu@sha256:8dc9652808dc091400d7d5983949043a9f9c7132b15c14814275d25f94bca18a
Deleted: sha256:7d3f705d307c7c225398e04d4c4f8512f64eb8a65959a1fb4514dfde18a047e7
Deleted: sha256:d9db289b9342d9617596cd6ee3bba988629e24d9afa5db4e4b0e4e491c65007d
Deleted: sha256:a87725e8597b97f2399bc3aa50b0e2eec903b8ce19055668d3befb012918205c
Deleted: sha256:38cf10a2801529348366953e9b933d3524360dedc91d3e4d5d7f941da0c973c9
Deleted: sha256:61172966249d43026dbd017eec3a9575e37bddf8a269a9f09ecb559d7bfe7fef
Deleted: sha256:57145c01eb80040fdd0a24cde20af4788605b49593188d4f7efab099af89a08e

C:\Users\Harvey Samson>docker images
REPOSITORY    TAG      IMAGE ID       CREATED       SIZE
ubuntu        16.04    9ff95a467e45   9 days ago    135MB

C:\Users\Harvey Samson>
```

- Running our container


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Command Prompt                                                                    —  □  X

C:\Users\Harvey Samson>docker images
REPOSITORY    TAG      IMAGE ID       CREATED       SIZE
ubuntu        16.04    9ff95a467e45   9 days ago    135MB
ubuntu        16.10    7d3f705d307c   3 years ago   107MB

C:\Users\Harvey Samson>docker rmi 7d3f705d307c
Untagged: ubuntu:16.10
Untagged: ubuntu@sha256:8dc9652808dc091400d7d5983949043a9f9c7132b15c14814275d25f94bca18a
Deleted: sha256:7d3f705d307c7c225398e04d4c4f8512f64eb8a65959a1fb4514dfde18a047e7
Deleted: sha256:d9db289b9342d9617596cd6ee3bba988629e24d9afa5db4e4b0e4e491c65007d
Deleted: sha256:a87725e8597b97f2399bc3aa50b0e2eec903b8ce19055668d3befb012918205c
Deleted: sha256:38cf10a2801529348366953e9b933d3524360dedc91d3e4d5d7f941da0c973c9
Deleted: sha256:61172966249d43026dbd017eec3a9575e37bddf8a269a9f09ecb559d7bfe7fef
Deleted: sha256:57145c01eb80040fdd0a24cde20af4788605b49593188d4f7efab099af89a08e

C:\Users\Harvey Samson>docker images
REPOSITORY    TAG      IMAGE ID       CREATED       SIZE
ubuntu        16.04    9ff95a467e45   9 days ago    135MB

C:\Users\Harvey Samson>docker run ubuntu:16.04 /bin/echo 'Hello world!'
'Hello world!'

C:\Users\Harvey Samson>docker ps
CONTAINER ID   IMAGE    COMMAND    CREATED    STATUS    PORTS    NAMES

C:\Users\Harvey Samson>docker ps -a
CONTAINER ID   IMAGE          COMMAND                CREATED            STATUS                      PORTS    NAMES
84ab9a5caca8   ubuntu:16.04   "/bin/echo 'Hello wo…"  About a minute ago  Exited (0) 57 seconds ago            hopeful_elbakyan

C:\Users\Harvey Samson>docker run ubuntu:16.04 /bin/bash

C:\Users\Harvey Samson>docker ps -a
CONTAINER ID   IMAGE          COMMAND                CREATED            STATUS                      PORTS    NAMES
728c4b4828fe   ubuntu:16.04   "/bin/bash"             24 seconds ago      Exited (0) 14 seconds ago            pedantic_blackwell
84ab9a5caca8   ubuntu:16.04   "/bin/echo 'Hello wo…"  2 minutes ago       Exited (0) About a minute ago         hopeful_elbakyan

C:\Users\Harvey Samson>docker run -it ubuntu:16.04 /bin/bash
root@47c65d4a00e2:/# pwd
/
root@47c65d4a00e2:/# ls
bin  boot  dev  etc  home  lib  lib64  media  mnt  opt  proc  root  run  sbin  srv  sys  tmp  usr  var
root@47c65d4a00e2:/# exit
exit

C:\Users\Harvey Samson>
```

■ Command Prompt   —   □   ✕

C:\Users\Harvey Samson>docker exec -it be7 /bin/bash
Error: No such container: be7

C:\Users\Harvey Samson>docker ps
CONTAINER ID   IMAGE   COMMAND   CREATED   STATUS   PORTS   NAMES
7ef36fbf95dd   ubuntu:16.04   "/bin/sleep 3600"   2 minutes ago   Up About a minute   upbeat_mestorf

C:\Users\Harvey Samson>docker exec -it 7ef /bin/bash
root@7ef36fbf95dd:/# ps aux
USER   PID %CPU %MEM   VSZ   RSS TTY   STAT START   TIME COMMAND
root   1 0.0 0.0   4372   640 ?   Ss   15:38   0:00 /bin/sleep 3600
root   8 0.1 0.0 18236 3296 pts/0   Ss   15:40   0:00 /bin/bash
root   19 0.0 0.0 34420 2872 pts/0   R+   15:41   0:00 ps aux
root@7ef36fbf95dd:/# exit
exit

C:\Users\Harvey Samson>docker ps
CONTAINER ID   IMAGE   COMMAND   CREATED   STATUS   PORTS   NAMES
7ef36fbf95dd   ubuntu:16.04   "/bin/sleep 3600"   2 minutes ago   Up 2 minutes   upbeat_mestorf

C:\Users\Harvey Samson>docker stop
"docker stop" requires at least 1 argument.
See 'docker stop --help'.

Usage: docker stop [OPTIONS] CONTAINER [CONTAINER...]

Stop one or more running containers

C:\Users\Harvey Samson>docker stop 7ef
7ef

C:\Users\Harvey Samson>docker ps -a
CONTAINER ID   IMAGE   COMMAND   CREATED   STATUS   PORTS   NAMES
7ef36fbf95dd   ubuntu:16.04   "/bin/sleep 3600"   3 minutes ago   Exited (137) 9 seconds ago   upbeat_mestorf
47c65d4a00e2   ubuntu:16.04   "/bin/bash"   5 minutes ago   Exited (0) 4 minutes ago   infallible_darwin
728c4b4828fe   ubuntu:16.04   "/bin/bash"   6 minutes ago   Exited (0) 6 minutes ago   pedantic_blackwell
84ab9a5caca8   ubuntu:16.04   "/bin/echo 'Hello wo…" 8 minutes ago   Exited (0) 8 minutes ago   hopeful_elbakyan

C:\Users\Harvey Samson>

■ Command Prompt   —   □   ✕

C:\Users\Harvey Samson>docker ps -a
CONTAINER ID   IMAGE   COMMAND   CREATED   STATUS   PORTS   NAMES
47c65d4a00e2   ubuntu:16.04   "/bin/bash"   9 minutes ago   Exited (0) 9 minutes ago   infallible_darwin
728c4b4828fe   ubuntu:16.04   "/bin/bash"   11 minutes ago   Exited (0) 11 minutes ago   pedantic_blackwell
84ab9a5caca8   ubuntu:16.04   "/bin/echo 'Hello wo…" 13 minutes ago   Exited (0) 13 minutes ago   hopeful_elbakyan

C:\Users\Harvey Samson>docker rm 47c
47c

C:\Users\Harvey Samson>docker rm 728
728

C:\Users\Harvey Samson>docker rm 84a
84a

C:\Users\Harvey Samson>docker ps -a
CONTAINER ID   IMAGE   COMMAND   CREATED   STATUS   PORTS   NAMES

C:\Users\Harvey Samson>docker run --rm ubuntu:16.04 /bin/echo 'Hello and goodbye!'
'Hello and goodbye!'

C:\Users\Harvey Samson>docker ps -a
CONTAINER ID   IMAGE   COMMAND   CREATED   STATUS   PORTS   NAMES

C:\Users\Harvey Samson>